# Bridging Practices, Theories, and Technologies to Support Reminiscence

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**Dan Cosley**
Information Science
Cornell University
301 College Ave
Ithaca NY 14850
danco@cs.cornell.edu

**S. Tejaswi Peesapati**
Information Science
Cornell University
301 College Ave
Ithaca NY 14850
stp53@cornell.edu

**Maurice Mulvenna**
School of Computing and Mathematics,
University of Ulster
Shore Road, Newtownabbey
BT37 0QB UK
md.mulvenna@ulster.ac.uk

**Terence Wright**
School of Art and Design
University of Ulster
York Street
Belfast
BT15 1ED
t.wright@ulster.ac.uk

**Victoria Schwanda**
Information Science
Cornell University
301 College Ave
Ithaca NY 14850
vls48@cornell.edu


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## Abstract

Reminiscence is a valuable human activity; this one-day workshop explores how HCI practice and research can understand and support people in their reminiscing. The workshop has two main goals. First, it hopes to bring together academics and practitioners from both social and technical perspectives who are interested in studying and supporting reminiscence. Second, it hopes to explore key issues around current and potential uses of technology to support reminiscence, including 1) understanding people's current practices around reminiscing, 2) using empirical studies and theories of memory to inform technology designs, 3) evaluating existing technologies for reminiscence, 4) exploring ways that technology might support new reminiscing practices, and 5) supporting social aspects of reminiscence. We are particularly interested in bringing people from outside the CHI community into the workshop to add new perspectives and foster new collaborations around the work. A series of discussion-focused panels organized around the key topics identified by participants will lead to thoughtful examinations of these topics informed by multiple viewpoints. Our tangible planned outputs will be a set of recommendations for further research in this area and an outline plan for grant and book proposals at the intersection of reminiscing and technology.

**Keywords**
Reminiscence, autobiographical memory, social media

**ACM Classification Keywords**
H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

**General Terms**
Design, Experimentation, Theory

## Introduction

This one-day workshop explores how HCI-related practice and research can understand and support reminiscence. A growing group of practitioners and researchers, both inside and outside the CHI community, is doing design and empirical work around reminiscence. Examples of technologies built include Stevens et al.'s Living Memory Box [15], tabletop photo sharing tools [1], lifelogging technologies such as SenseCam [13], and tools such as CaraClock [16], FM Radio [11], and Pensieve [8] that leverage archives of pictures, audio recordings, and social media content. Studies of practice include Petrelli et al.'s examination of mementos [9] and capture of future memories [10], Rodden and Wood's studies of the management of digital photographs [12], and Wu et al.'s study of families with members with memory impairments [18].

This interest reflects the importance of reminiscing in daily life. Psychology and anthropology have shown that the function and process of reminiscing are complicated, valuable, and social (e.g., [2] [5][17]), as is the working of autobiographical memory itself (e.g., [3]). The psychological uses of reminiscence around self-knowledge, reflection, and problem-solving suggest connections to work that merges theoretical and technical views on personal informatics [7], lifelogging [14], and interpretation of biometric data [6].

## Goals

This workshop's goal is to bring together researchers and practitioners from all of these communities to explore potential relationships between technology and reminiscence. We hope to have participants with a wide variety of disciplinary backgrounds and at all career stages; to encourage discussion and interaction rather than presentation; to look at a variety of issues around the intersection of technology and reminiscence; and to form new collaborations including grant proposals and an edited book proposal that grow out of the interactions at the workshop. Another goal is to increase the visibility of reminiscence as an important topic in North America to complement the work in Europe over the last several years. Finally, we hope to increase international collaborations, including grant proposals aimed at NSF programs that target international teams.

## Tentative themes

Ultimately, the themes of the workshop will be determined by its participants, but based on our goal of fostering interdisciplinary discussions of the topic and an examination of the literature so far, we anticipate several likely themes, briefly outlined below.

*Understanding people's current practices around reminiscing.* Knowing the context of the activity to be designed for is important in design generally, and may be especially important in personal, emotional domains such as reminiscence. The workshop will provide a venue for researchers to present key insights from their studies of reminiscence behaviors.

*Using empirical studies and theories of memory to inform technology designs.* What can literature from social science disciplines say about the roles and risks of introducing technologies to support reminiscence? The workshop will identify a core set of studies and theories that are likely to inform the discussion of bringing technology and reminiscence together.

*Presenting, critiquing, and evaluating existing technologies for reminiscence.* One goal of the workshop is to look at the current universe of technologies that support reminiscence with an eye toward what works, and what is likely to work. This includes both empirical evaluation of existing technologies deployed in the world, and analytical evaluation of existing and proposed technologies using the practices and theories described above.

*Exploring ways that technology might support new practices around reminiscing*. Technologies such as SenseCam provide new ways of experiencing and remembering the past, while people create memory-laden content in social media that technologies might be able to leverage. Exploring new possibilities that technologies offer for reminiscing will be an important goal of the workshop. Both specific designs and analysis of current technologies will be valued.

*Supporting social aspects of reminiscence.* Reminiscence often has a distinctly social character, being used to connect to other people and keep one's own relationships strong. Many designs will need to take these social aspects into account. In particular, we are interested in designs that might integrate with existing communication and social technologies.

## Pre-Workshop Activities

The goal of the pre-workshop activities is to ensure the workshop itself flows smoothly, primarily by encouraging participants to become familiar with each others' work and backgrounds in advance. Thus, on the workshop website, we will post links to participants' websites and position papers. We will probably use a wiki-based site to encourage lightweight commenting on the papers before the workshop. We will also use these papers, with input from participants, to form small groups around the themes that emerge, and to engage these groups in planning activities for 1-hour sessions focused on these themes. There's a limit to how much preparation we can reasonably expect people to undertake, but we will provide opportunities for people keen to be involved to help shape the topical and activity structure of the workshop.

## Workshop Activities

Our main goal during the workshop is to maximize discussion and interaction, which suggests a combination of panels, small group discussions, and other activities, with minimal formal presentation. The exact composition of the groups and activities will depend on the interests of the participants, but below is a proposed scratch schedule that assumes that, of our five themes, we find three broad ones from participants' position papers, that other perspectives can be reasonably merged into those themes, and that we choose a short-talk panel + discussion format for each of those sessions. We also hope to bring in 1 or 2 researchers who would be relevant to the workshop but who might not normally come to CHI; thus, there is room up front for 1 (perhaps 2) invited talks that will serve as an incentive for people outside the HCI community to attend.

Latter parts of the workshop will be explicitly structured around fostering collaboration around specific research activities, grant proposals, and proposals for an edited volume that will reflect participants' views on what is known, what is disputed, and what should be studied next in the areas. We will produce materials for the CHI spotlight on workshops and for the workshop website that reflect these outcomes.

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